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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
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NGUYEN, TU X

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/848,459

Applicant(s)

KANTOLA ET AL.

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. Claim 21 rejected under 35 U.S.C. 112, second paragraph, "high frequency" as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-10, 12, 15, 20-21 and 26, are rejected under 35 U.S.C. 102(e) as being anticipated by anticipated by Tuttle et al. (US Patent 6,101,375).

Regarding claims 1 and 26, Tuttle et al. disclose a communications device (200, 300) comprising:

means for transmitting a signal to another party (see col.1 lines 15-19); and

means for controlling the signal level with which said transmitting means transmits (see col.2 lines 26-31),

wherein said signal level is initially relatively low (see col.1 lines 24-25) and when a connection is established with said another party, said signal level is increased (see col.1 lines 39-46).

Regarding claim 9, Tuttle et al. disclose a communications device (200, 300) comprising:

means for receiving a signal to another party (see col.1 lines 15-19); and

means for controlling the signal level with which said signal is received (see col.2 lines 26-40),

wherein said signal level is initially relatively low (see col.1 lines 24-25) and when a connection is established with said another party, said signal level is increased (see col.1 lines 39-46).

Regarding claim 2, Tuttle et al. disclose said control means is arranged to control the power of said signal (see 22, 31 fig.3,4).

Regarding claims 3 and 10, Tuttle et al. disclose said control means is arranged to control the signal level of the transmitted signal to be one of only two levels, the initially relatively low level and the increased level (see col.2 lines 35-51, "minimum level" and "higher level" reads on "two levels"; and therefore, Tuttle et al. disclose at least or more than two power levels which satisfy on limitation "only two").

Regarding claim 4, Tuttle et al. disclose said signal level is initially at a starting level and is increased to the relatively low level (see col.2 lines 35-36 and lines 50-51).

Regarding claim 5, Tuttle et al. disclose said starting point is no signal (see col.2 lines 57-61).

Regarding claim 6, Tuttle et al. disclose said signal level is increased until a connection is established with said another party (see col.2 lines 39-56).

Regarding claim 7, Tuttle et al. disclose said signal level has a maximum value to which it can be increased when no connection has been established with said another party (see col.2 lines 57-61).

Regarding claims 8 and 15, Tuttle et al. disclose said maximum value is less than the signal level used when a connection with the another party has been established (see col.2 lines 39-61, once the connection has been established, "the transmission could be at a predetermined higher level" reads on the claim limitation).

Regarding claim 12, Tuttle et al. disclose said starting point is maximum attenuation (see col.3 lines 9-12, "high power wake-up signal" reads on "maximum attenuation").

Regarding claim 20, Tuttle et al. disclose said connection with said another party is a wireless connection (see col.1 lines 15-19).

Regarding claim 21, Tuttle et al. disclose connection is a high frequency connection (see col.1 lines 15-19, RF data communication is inherently understood that there is carrier (high) frequency communication between devices).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18 and 22-23, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle et al. in view of Meng (US Patent 6,697,375).

Regarding claim 18, Tuttle et al. fail to disclose when a plurality of another parties are provided, said communications device is arranged to establish a connection with the closest another party.

Meng discloses when a plurality of another parties are provided, said communications device is arranged to establish a connection with the closest another party (see col.7 lines 29-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Meng in order to provide each communication link is set up dynamically through a mutually understood protocol.

Regarding claim 22, Tuttle et al. fail to disclose said high frequency connection is of the order of giga Hertz.

Meng discloses said high frequency connection is of the order of giga Hertz (see col.2 lines 16-34). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Meng in order to provide a communication system operating in range of giga Hertz that allows for an increase in data capacity when receives are operating closer to transmitters, and thereby using less power.

Regarding claim 23, the combination Tuttle et al. and Meng disclose said wireless connection is a Bluetooth link (see Meng, col.7 lines 54-55).

6. Claims 19 and 24-25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle et al. in view of Pitroda et al. (US Patent 6,705,520).

Regarding claim 19, Tuttle et al. fail to disclose said communication device is point of sale device.

Pitroda et al. disclose said communication device is point of sale device (see col.3 lines 44-55). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Pitroda et al. in order to provide a computer that being equipped with transmitter/receiver to exchange wireless communication with another wireless device such as PDA mobile phone as suggested by Pitroda et al. (see col.3 lines 30-43).

Regarding claim 24, Tuttle et al. fail to disclose the wireless connection is an infrared connection.

Pitroda et al. disclose the wireless connection is an infrared connection (see col.3 lines 49-50). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Pitroda et al. in order to provide short range communication between device which require less power than long range communication.

Regarding claim 25, Tuttle et al. fail to disclose said another party is a mobile telephone.

Pitroda et al. disclose another party is a mobile telephone (see col.3 lines 30-44). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of

Pitroda et al. in order to provide a mobile telephone that being equipped with transmitter/receiver to exchange wireless communication with another wireless device.

7. Claims 11, 13-17 and 27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle et al. in view of Beamish et al. (US Patent 6,445,732).

Regarding claim 11, Tuttle et al. fail to disclose said signal is arranged to be attenuated by a starting amount and the attenuation is reduced to provide signals at the relatively low level.

Beamish et al. disclose said signal is arranged to be attenuated by a starting amount and the attenuation is reduced to provide signals at the relatively low level (see col.6 lines 32-56). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Beamish et al. in order to provide proper attenuation level is applied to the incoming signal at substantially all times.

Regarding claim 13, Tuttle et al. disclose attenuation of the received signal level is decreased.

Beamish et al. disclose attenuation of the received signal level is decreased (see col.5 lines 52-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Beamish et al. in order to provide attenuation controller depending on received signal strength to adjust increasing/decreasing level of attenuation.



Regarding claims 14-15, Tuttle et al. fail to disclose said attenuation has a minimum value to which it can be decreased.

Beamish et al. disclose said attenuation has a minimum value to which it can be decreased (see col.8 lines 27-40). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Beamish et al. in order to provide attenuation controller depending on received signal strength to adjust increasing/decreasing level of attenuation.

Regarding claims 16-17 and 27, Tuttle et al. disclose everything as claim 9 above. However fail to disclose the attenuation applied to said received signals.

Beamish et al. disclose the attenuation applied to said received signals (see col.5 lines 52-62). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Tuttle et al. with the above teaching of Beamish et al. in order to provide attenuation controller depending on received signal strength to adjust increasing/decreasing level of attenuation.

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### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

TW

6/4/04

NAY MAUNG

SUPERVISORY PATENT EXAMINER